DOCUMENT RESUME

ED 093 117 EC 062 206

AUTHOR	White, Alan J., Ed.; Milbury, Frank, Comp.
TITLE	Evaluation of Programs for the Gifted and Talented: Report of the Connecticut Task Force on Evaluation. Working Draft.
INSTITUTION	Connecticut State Dept. of Education, Hartford. Bureau of Pupil Personnel and Special Education Services.
PUB DATE	Jun 74
NOTE	87p.; For related reports see EC 062 207 and EC 062 208
EDRS PRICE	MF-$0.75 HC-$4.20 PLUS POSTAGE
DESCRIPTORS	*Exceptional Child Education; *Gifted; *Models; Program Effectiveness; *Program Evaluation; Questionnaires; Rating Scales; State Programs; Testing
IDENTIFIERS	*Connecticut

ABSTRACT

The report (in working draft form) of the Connecticut Task Force on Evaluation of Programs for the Gifted and Talented examines evaluation issues of product, process, and presage and provides samples of nonstandardized evaluation instruments being used in 21 local Connecticut gifted programs. Product evaluation is seen to focus on student achievement gains. Given is an annotated listing of 10 aptitude measures, six achievement measures, and 12 creativity measures appropriate for the product evaluation approaches. Process evaluation is reported to center on key aspects of the ongoing student-teacher interaction. Described are three instruments: the Flanders Interaction Analysis, the Cerli Matrix, and a Class Activities Questionnaire. The presage design is explained to estimate the quality of a program by assessing key input variables, the DESDEG model (Diagnostic and Evaluative Scales for Differential Education for the Gifted) is reviewed. Also described are two comprehensive models for program evaluation. The Eash model stresses the need for evaluation to allow for evolving program goals, while Key Features attempts to identify major variables of program success, prime interest groups, and relevant time factors. The samples of nonstandardized evaluation instruments from local programs include teacher questionnaires, student rating scales, parent questionnaires, and student self-evaluation forms. (DB)

ED 093117

REPORT OF THE TASK FORCE ON:

PROGRAM EVALUATION

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CONNECTICUT PROGRAMS

for the
GIFTED & TALENTED

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Hartford, Connecticut

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EVALUATION OF PROGRAMS FOR THE GIFTED AND TALENTED

REPORT OF THE CONNECTICUT TASK FORCE ON EVALUATION

(WORKING DRAFT)

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CONNECTICUT STATE DEPARTMENT OF EDUCATION
BUREAU OF PUPIL PERSONNEL AND SPECIAL EDUCATIONAL SERVICES
HARTFORD, CONNECTICUT

JUNE 1974

FOREWORD

This report represents the culmination of the efforts of a large number of people to meet the needs of professional personnel involved in the evaluation of programs for the gifted and talented in Connecticut.

For the most part, the work of writing and compiling this booklet was done by teachers and administrators in gifted programs in the state. They accomplished this task in a matter of a few short months, meeting afternoons and evenings on their own time. In addition to doing research and writing articles, the task force leader and members have attempted to bring together the best information from a wide variety of sources. Much credit belongs to individuals and agencies from outside Connecticut who have been kind enough to give us permission to reprint some of their materials.

This report is a preliminary working draft and is subject to further revision. We welcome all comments and suggestions for improvement, since your responses will provide valuable input in the preparation of the final draft. Please address all correspondence to William G. Vassar, Box 2219, Connecticut State Department of Education, Hartford, Connecticut, 06115.

We wish to extend our personal thanks to all who have worked so hard to produce this report in the interest of the gifted and talented children of Connecticut.

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PREFACE

The Task Force on Evaluation has attempted in the past few months to come to grips with some of the major issues in the measurement and assessment of programs for the gifted.

Aside from a number of important technical considerations, the major issue in evaluation of programs for the gifted rests in determining precisely what to measure. A good evaluation model would allow measurement to be based on the unique characteristics of the gifted and also on teaching techniques and their influence on the learning process.

The task force has considered measures of product, process, and presage. The list is by no means complete but rather introductory. A major roadblock in compiling materials in this area is the lack of specific information on evaluation of gifted programs. As a result of the research, we have developed a healthy respect for the necessity of progam evaluation. Good evaluation leads the way to a good program.

I know that I speak for the entire task force when I say that this project has been a professionally fulfilling experience. We would all like to extend thanks to the many people who helped us gather information and ideas.

Frank Milbury

ACKNOWLEDGEMENTS

Many thanks to the following individuals and groups who have given so generously of their time and expertise in the preparation of this publication:

Dr. Angela Terry and Dr. James Burke of the Connecticut State Department of Education for the willing support and encouragement they gave to this task force

Dr. Joseph Renzulli, University of Connecticut, for his valuable advice and for allowing us to draw so freely from his own publications

The Florida State Department of Education, Croft Publications, and the numerous Connecticut programs for the gifted and talented for giving us permission to reprint their useful materials

Capitol Region Education Council and especially Charles Haller and Virginia Wells for their assistance since the inception of the project and for the smooth handling of the publication of the report.

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INTRODUCTION

Gifted programs depend for their very existence on the support of local communities, boards of education, and the administrative and teaching personnel in each school district. In an effort to assure themselves that time and resources are being well spent, these groups and individuals rightfully expect special programs to be held accountable for instructional outcomes and fulfillment of stated objectives. Evaluation of programs for the gifted and talented is, however, fraught with difficulties. It is no simple matter, for example, to locate tests which adequately measure gains in special interest areas or which assess levels of cognitive operation beyond simple recall of facts. It is also difficult to measure many important affective outcomes. However, with a thorough knowledge of the techniques and instruments available, meaningful evaluation can be acheived.

Three different approaches to evaluation are described in this booklet, along with a statement of their strengths and weaknesses and examples of assessment techniques appropriate to each method. Also included are two comprehensive evaluation models, each combining various features of the product, process, and presage approaches. A variety of informal measures, many of which have been developed by local Connecticut programs for their own use, can also be used profitably in conjunction with these two comprehensive models. Finally, a bibliography is offered in the hope that it will provide further information and direction for interested readers.

The truest evaluation of programs for the gifted and talented must, however, focus on the individual students themselves and will ultimately depend upon measures which are longer ranged and more elusive than those described in this booklet. The student's development of a positive self-concept, his actualization of potential, and his contributions to society may very well be the most valid measure of the success of a gifted program.

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I. OVERVIEW AND CAUTIONS

CAUTIONS

The materials on the following pages describe three basic approaches to evaluation of educational programs: (1) product measurement, (2) process measurement, and (3) presage. Each method has its own strengths and weaknesses; but when applied to assessment of programs for the gifted and talented, there are special cautions and limitations which ought to be noted.

I. Product evaluation usually is concerned with measurement of such things as student gains in achievement or other areas of growth and change in student behavior. It is this sort of information that is popularly thought of as "hard data," incontrovertible evidence that a change has or has not occurred as a result of some sort of educational intervention. In actuality, however, this type of assessment is fraught with all sorts of pitfalls for the unwary. A full discussion of many of the difficulties of product assessment can be found in the technical books and articles on measurement and research design listed in the bibliography in the last section. At this point, however, a brief review of some of the problem areas should suffice to alert the interested evaluator.

One problem lies in the area of research design. It is difficult to be certain that the measured growth was really caused by the special program unless a control group has also been measured. It could very well be possible that two or three years of academic growth in a single year could have occurred even among gifted students not in the special program, simply as a result of their extraordinary learning abilities. In a one-group design, it is also possible that improvement could be due to the effects of special attention, the skills of a different teacher, or other extraneous factors. It goes without saying that most evaluations enjoy nothing near the ideal experimental design. Giving a pre-test and post-test to a single group can therefore yield results that are nearly impossible to interpret correctly.

A second problem associated with product evaluation is the appropriateness of the testing instruments that are used. The usual achievement and general aptitude tests do not do a very accurate job of assessing the high-level objectives and unique learning experiences that characterize programs for the gifted and talented. In such programs, there is typically more emphasis on higher cognitive abilities, creativity, problem-solving, judgmental abilities, and upper-range affective and non-cognitive concerns such as attitudes, interests, and values. Tests which measure global, general achievement on the lower cognitive levels of knowledge and memory can hardly be expected to assess the many specific and unique objectives of gifted programs in an appropriate way.

Other problems arise in the area of technical considerations. Most of the available tests have norms which are based on average population samples, and thus may be inappropriate for use with gifted children. The ceilings on the tests may be too low to provide much meaningful information

on gifted children. Further difficulties will be of course encountered if, in an effort to avoid the ceiling problem, gifted elementary-aged children are given tests appropriate for high school students.

It should be remembered that many students entering gifted programs are already operating at very high levels compared to their age-mates. The selection criteria may be based on achievement scores above the 90th percentile, and it would not be uncommon to find students close to the test ceiling at the start of the year. Certainly it would be difficult to show much gain in percentile points at the end of the year for such students. Indeed, progression from 98th to 99th percentile might require as much effort, in terms of test items correct, as a progression from 50th to 84th percentile, since each of these gains represents the length of approximately one unit of standard deviation.

Sometimes, even when other conditions such as good research design and appropriate instrumentation have been met, a problem may be encountered in measuring change by the use of gain scores. It is not sufficient merely to subtract pre-test scores from post-test scores, since the amount of measurement error in the resultant gain score will be even greater than the amount of error in both pre- and post-test scores together. The result will be a highly unreliable measure of change.

One final caution ought to be noted: regression effects occur when any group which is selected on the basis of extreme scores is tested a second time. The poorest scorers look better the next time tested, whereas the highest original scores tend to look worse, or at least appear to make only small gains. Both groups, in effect, regress toward the mean. This purely statistical phenomenon makes it rather difficult to demonstrate large gains in programs for gifted children.

II. Process evaluation is sometimes resorted to in order to measure various aspects of ongoing student-teacher behavior. In programs for the gifted, it is appropriate to attempt to measure the quality of interactions in the classroom and the levels of thought processes and instructional questions. The major pitfall, however, lies in the area of accuracy of observations. Particularly troublesome is the problem of low observer reliability. Additionally, there is the possibility that the lesson being observed is actually a "showcase lesson" and not really typical of what happens every day. A possible way around these problems may be to use students themselves as the observers, as in the Class Activities Questionnaire.

III. The Presage design (as exemplified by aspects of the DESDEG model) attempts to estimate the quality of a program by assessing key variables beforehand, much as college admissions officers or personnel managers attempt to evaluate applicants on the basis of factors that are assumed to have a positive relationship with success in college or on the job. There is a jump in logic, however, from good input variables to good results. In fact, there may be little relationship. A lot depends, of course, on the selection of variables and the qualifications of the evaluator.

II. INSTRUMENTS FOR ASSESSING PRODUCT : AN ANNOTATED LISTING OF COMMERCIALLY AVAILABLE TESTS

ADDRESSES OF COMMERCIAL TEST PUBLISHERS

American Guidance Service, Inc., Publishers' Building, Circle Pines, Minnesota 55014.

Bobbs-Merrill Company, Inc., 4300 West 62nd Street, Indianapolis, Ind. 46206.

California Test Bureau, Del Monte Research Park, Monterey, California 93940.

Consulting Psychologists Press, Inc., 577 College Avenue, Palo Alto, Calif. 94306.

Educational and Industrial Testing Service, P.O. Box 7234, San Diego, Calif. 92107.

Educational Testing Service, Princeton, New Jersey 08540.

Harcourt, Brace & World, Inc. 757 Third Avenue, New York, N.Y. 10017.

Houghton Mifflin Company, 110 Tremont Street, Boston, Mass 02107.

Industrial Relations Center, University of Chicago, 1225 East 60th Street, Chicago, Ill. 60637.

Institute for Personality and Ability Testing, 1602 Coronado Drive, Champaign, Ill. 61822.

Psychological Corporation, 304 East 45th Street, New York, N.Y. 10017.

Psychological Test Specialists, Box 1441, Missoula, Montana 59804.

Psychometric Affiliates, Brookport, Ill. 62910.

Scholastic Testing Service, Inc., 480 Meyer Road, Bensenville, Ill. 60106.

Science Research Associates, Inc., 259 East Erie Street, Chicago, Ill. 60611.

Sheridan Psychological Services, P.O. Box 837, Beverly Hills, Calif., 90213.

C. H. Stoelting Company, 424 North Homan Avenue, Chicago, Ill. 60624.

Teachers College Press, Teachers College, 525 West 120th Street, New York, N.Y. 10027.

University Bookstore, Purdue University, 360 State Street, West Lafayette, Indiana 47906.

Western Psychological Services, 12035 Wilshire Boulevard, Los Angeles, California 90025.

APTITUDE MEASURES

DIFFERENTIAL APTITUDE TEST. Grade 8-13 and Adults, 9 scores. Verbal Reasoning, Numerical ability, total (Scholastic Aptitude), Abstract Reasoning, Space Relations, Mechanical Reasoning, Clerical Speed Accuracy, and Language Usage. (Psychological Corp.)

HERMON-NELSON TESTS OF MENTAL ABILITY. Grade 3-17, gives verbal, quantitative and overall score (Houghton Mifflin Co.)

KUHLMANN-ANDERSON INTELLIGENCE TESTS. Grade Kgn - 12, gives verbal, quantitative and total score. (Personnel Press, Inc.)

LORGE-THORNDIKE INTELLIGENCE TESTS. Grade Kng - 12, gives verbal, nonverbal, and total scores. (Houghton Mifflin Co.)

ACADEMIC PROMISE TEST. Grade 6-9, 7 scores (Abstract Reasoning, Numerical, Non-Verbal Total, Language Usage, Verbal, Verbal Total, and Total. (Psychological Corp.)

MILLER ANALOGIES TEST. Single Score Test of high difficulty level (Psychological Corp.)

STANFORD-BINET INTELLIGENCE SCALE. Ages 5 and over: an item classification system for use by school psychologists in analyzing and reporting performance in 6 categories: general comprehension, visual motor ability, arithmetic reasoning, memory and concentration, vocabulary and verbal fluency, judgment and reasoning.

WECHSLER INTELLIGENCE SCALE FOR CHILDREN, by David Wechsler. 13 - 15 scores: Verbal (information, comprehension, arithmetic, similarities, vocabulary, digit span (optional), total) performance, (picture completion, picture arrangement, block design, object assembly, mazes, (optional), coding, total). The WICS is currently the best available compendium of individually administered subject comparison techniques purporting to measure intelligence. Ages 5 - 15.

OTIS-LENNON MENTAL ABILITY TEST, by Arthur T. Otis & Roger T. Lennon. Measure of general ability or scholastic aptitude. Brief test 30-45 minutes for all ages K-12. Provides I.Qs, percentile ranks and stanines by age and grade. Available through Western Psychological Services.

CALIFORNIA TEST OF MENTAL MATURITY, by Elizabeth T. Sullivan, Willis W. Clark and Ernest W. Tiegs. Intelligence test providing 8 scores: logical reasoning, spatial relationships, numerical reasoning, verbal concepts, memory, language total, non-language total, total. (K-adult) approximately 90 minutes provides deviation I.Q.

ACHIEVEMENT MEASURES

IOWA TESTS OF BASIC SKILLS. Grade 3-9, 15 scores - Main areas covered vocabulary, reading, language, work-study, arithmetic, and total. (Houghton & Miffin Co.)

METROPOLITAN ACHIEVEMENT TEST - Grade 1.5 - 12, number of scores varies depending on level of test (Example: primary battery Grade 1.5 has 4 scores. Advanced Battery Grade 7-9 has 14 scores) (Harcourt, Brace, and World, Inc.)

SRA ACHIEVEMENT SERIES. Grade 1-9, test for Grade 1-2 gives 7 scores, Grade 6-9 gives 11 scores. (Science Research Assoc.)

SEQUENTIAL TESTS OF EDUCATIONAL PROGRESS, by Cooperative Test Division, Educational Testing Service. STEP are designed to measure the outcomes of educational experiences, both formal and informal, from elementary school to college. Tests for communication (separate tests for reading, writing, essay writing, and listening) science, mathematics and social studies. Authors emphasize utilization of learned skills in solving new problems.

STANFORD ACHIEVEMENT TEST, by Truman L. Kelley, Richard Madden, Eric F. Gardner, Herbert C. Rudman. There are batteries at five levels K-12. Includes subtests such as Language, Arithmetic, Social Studies, Reading and Spelling. Long (90 minutes to 5 hours.) depending on which level.

CALIFORNIA ACHIEVEMENT TESTS, by Ernest W. Tiegs & Willis W. Clark. Achievement tests providing 11 or 12 scores: reading, (vocabulary, comprehension, total) mathematics (computation, concepts, and problems, total) language (auding (level 1 only), mechanics, usage, and structure, total, spelling), total. McGraw-Hill.

CREATIVITY MEASURES

TORRANCE TESTS OF CREATIVE THINKING, by E. Paul Torrance, Ph.D. Assesses 4 mental characteristics important to creative thinking ability: Fluency, Flexibility, Originality, and Elaboration. Presented in 2 test booklets. 1. Figural which requires drawing responses, group test (k-adult) 45 minutes. 2. Verbal requires written responses. 60 minutes.

"Torrance Tests of Thinking Creatively with Words" (Forms A & B) contains 7 subtests (Personnel Press Inc.)

"Torrance Tests of Thinking Creatively with Pictures" (Forms A & B) contains 3 subtests (Personnel Press Inc.)

16 PERSONALITY FACTORS TEST - Indicates the type personality which is creative or inventive. (The Institute of Personality and Ability Testing)

GUILFORD-ZIMMERMAN INTEREST INVENTORY covers 10 interest areas one of which is "Creative" (Areas where inventiveness is important) (Sheridan Psychological Services, Inc.)

NEW USES (NU) - Measures of structure of intellect ability of convergent production thinking (Sheridan Psychological Services, Inc.)

PERTINENT QUESTIONS (PQ) - Measures the ability to see Implications, anticipate and make predictions (Sheridan Psychological Services, Inc.)

PLOT TESTS (PT) - Measures ideation fluency and originality (Sheridan Psychological Services, Inc.)

PROJECT TALENT CREATIVITY TEST - Measures inventiveness (University of Pittsburgh)

CREATIVITY TEST (Form A) - Measures fluency, flexibility and originality. (Purdue University)

FLANAGAN APTITUDE CLASSIFICATION TEST #18 - Ingenuity - Measures creativity or inventiveness. (Science Research Assoc.)

REMOTE ASSOCIATES TEST, by S.A. Mednick & M.T. Mednick. Measures ability to think creatively based on "associative" interpretation of the creative thinking process--an interpretation which envisions the process as one of seeing relationships between seemingly "mutually remote" ideas and approach to various problems and allows demonstration of creative problem solutions. Available from H.J.P. Schubert.

III. INSTRUMENTS FOR ASSESSING PROCESS :

A. FLANDERS INTERACTION ANALYSIS

B. CERLI MATRIX

C. CLASS ACTIVITIES QUESTIONNAIRE

A. FLANDERS INTERACTION ANALYSIS

The Flanders Interaction Analysis addresses the teaching process by promoting teacher sensitivity to their own teaching behaviors and understandings of how these behaviors affect classroom climate and individual pupils.

Flanders classifies classroom verbal interaction in ten categories, seven of which identify teacher talk, two concern student response, and one is silence or confusion. Under teacher talk the following items are used:

1. Accepting and clarifying student feelings
2. Praising or encouraging student behavior
3. Accepting and clarifying student ideas
4. Asking questions
5. Lecturing, giving information, or opinion
6. Directions
7. Criticizing or justifying authority

Items one through four are considered indirect teacher talk, items five through seven are considered direct teacher talk. Student categories consist of 8, response to the teacher, and 9, student initiated talk. Category ten is used to identify silence or confusion.

The observer, who may be present in the classroom, or who may listen to a tape later, usually records the proper category from one to ten in sequence using time intervals of three seconds between each sample of behavior. This is done by recording the appropriate category number. After an observation session, the observer enters all category numbers in the form of tallies in a ten row by ten column grid, called a matrix. The matrix reveals both quantification and patterns of verbal interaction. Data which is related to quantification includes the percentage of time consumed 1. by teacher talk, 2. by student talk and 3. in silence or confusion.

The matrix, while summarizing the data found by the observer, also maintains some of the sequence. The teacher can see the patterns of his reaction to student response, to silence, or to student initiation. One may find answers to such questions as, "What behavior elicits what responses from students?" The Flanders system does yield descriptive information about the teacher-pupil dialogue or process, but this information is not intended as an evaluation of teaching product. Value judgments of process may be made after studying the interaction matrix.

The system was developed and refined by Flanders in the early 1950's. Research indicates that above average achievement and positive student behavior appears to be related to certain kinds of teacher behaviors such as acceptance and clarification of student ideas, use of directions and criticism, amount of time spent talking, and the encouragement of student-initiated talk.

Procedure of Analysis

The total analysis includes ten categories and the sequence of the categories. The initial work may be with the categories only and not the sequence. There are two methods of obtaining a sample.

a. Classify each separate sentence, or parts of a sentence if it appears long and complex.

b. Classify each statement being spoken at three second intervals.

It is suggested that initial work be done by the separate sentence approach, and that the change to the three second approach be done after the person is familiar with the categories. Meaningful feedback is accomplished either way. However, if the person wishes to relate the results of his analysis to that reported in the research literature, then the three second interval and sequential tabulation must be used.

Some points to remember:

Rule 1. When not certain in which of two or more categories a statement belongs, choose the category that is numerically farthest from category 5. This is true except when one of the two categories in doubt is category 10, which is never chosen if there is an alternate category under consideration.

Rule 2. If the primary tone of the teacher's behavior has been consistently direct or consistently indirect, do not shift into the opposite classification unless a clear indication of shift is given by the teacher. This rule is often called the rule of the unbiased biased observer; that is, the observer is operating in a climate of general direct or indirect influence, and although he is ready to move to the opposite set of categories, he must feel that the teacher has definitely moved to the opposite type of influence before he is willing to grant a change in interaction pattern.

Rule 3. The observer must not be overly concerned with his own biases or with the teacher's intent.

Rule 4. If more than one category occurs during the three second interval, than all categories used in that interval are recorded; therefore, record each change in category. If no change occurs within three seconds, repeat that category number. (Applies only if three second type of analysis is underway.)

Rule 5. If a silence is long enough for a break in the interaction to be discernible, and if it occurs at a three second recording time it is recorded as a 10. (This rule is listed because observers tend to ignore short periods of silence.)

Reference: The Role of the Teacher in the Classroom, Amidon, E. J., Flanders, N. A., Paul S. Amidon and Association, Inc., Minneapolis, Minnesota, 1963.

SUMMARY OF CATEGORIES FOR CLASSROOM INTERACTION ANALYSIS

TEACHER TALK	INDIRECT INFLUENCE	1. ACCEPTS FEELING: accepts and clarifies the feeling tone of the students in a non-threatening manner. Feelings may be positive or negative. Predicting and recalling feelings are included. 2. PRAISES OR ENCOURAGES: Praises or encourages student action or behavior. Jokes that release tension, not at the expense of another individual, nodding head or saying "ohhuh?" or "go on" are included. 3. ACCEPTS OR USES IDEAS OF STUDENT: clarifying, building, or developing ideas or suggestions by a student. As teacher brings more of his own ideas into play, shift to category five. 4. ASKS QUESTIONS: asking a question about content or procedures with the intent that a student answer.
	DIRECT INFLUENCE	5. LECTURES: giving facts or opinions about content or procedures; expressing his own ideas; asking rhetorical questions. 6. GIVES DIRECTIONS: directions, commands, or orders with which a student is expected to comply. 7. CRITICIZES OR JUSTIFIES AUTHORITY: statements intended to change student behavior from nonacceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing, extreme self-reference.
STUDENT TALK		8. STUDENT TALK-RESPONSE: Talk by students in response to teacher. Teacher initiates the contact or solicits student statement. 9. STUDENT TALK-RESPONSE: talk by students which they initiate. If "calling on" student is only to indicate who may talk next observer must decide whether student wanted to talk. If he did, use this category.
		10. SILENCE OR CONFUSION: pauses, short periods of silence, and periods of confusion in which communication cannot be understood by the observer.

B. CERLI MATRIX*

The Cerli Matrix, prepared under William M. Rogge, is an observation system with two dimensions. In one dimension are four simple and easily understood process steps.

1. Seek or ask for information or contributions. (S)
2. Inform. (I)
3. Accept responses, either directly or indirectly through elaboration. (A)
4. Reject responses. (R)

The other dimension covers major aspects of content.

1. Cognition - memory items where no obvious relating of ideas or items is involved. (C)
2. Productive thinking where some relating of ideas or items is involved. (P) Three major types are involved.
   - Convergent where one "right" answer exists.
   - Divergent where several answers are acceptable.
   - Evaluation which involves a judgment based on the person's own value system.
3. Emotion of the moment (emotion that occurred at earlier times is recorded as cognition - memory). (E)
4. Management involves any immediate changes in teacher - student - student relationships. (M)

The two dimensions make up a 4 x 4 matrix with single letters to serve as Code designations for each cell: As these behaviors occur they are checked in the appropriate box.

CONTENT

Process	C	P	E	M
S				
I				
A				
R				

Thus, the upper left hand cell is designated as SC. The lower right one as RM.

*Materials in this section are derived from Rogge, W. M. Independent Study: A Model of New Teacher-Student Relationships for Talented and Gifted Children. Department of Program Development for Gifted Children, State of Illinois, 1968.

Illustrations of each cell are given below:

SC: Who discovered America?

What is your opinion?

SP: What are some answers to the equation, - + - = 4?

What season of the year provides the most fun? Why?

SE: What do you feel about death?

Would you like to kick him, would that make you feel better?

SM: Shall we dismiss class early today? (Asked seriously of course)

Who wants to give the first speech?

IC: My opinion is . . . (not IE as no <u>immediate</u> feeling is yet evident).

The answer is. . .

IP: 2 + 2 and ½ + 3½ are two illustrations out of many possible illustrations of answers to the question, - + - = 4.

The evidence to support my opinion is. . .

IE: I feel like crying.

My happiness cloaks me as a gossamer thread.

IM: Open your books to page 3.

John, please talk to me.

AC: That's a good answer.

Yes, I can see how your method would work with metal as well as wood.

AP: Your theory would also explain how the razor blade would float when it was broken into small pieces.

Your answer gives me another idea.

AM: (In response to a raised hand)

John, you may answer.

I'm willing to stop class early because of the good case you made for the decision.

RC: Stupid.

Try it again (If the answer suggests a way out, don't score it as RC.) An illustration:

"Here is another way that may work."

RP: You should have given that more thought.

Your answer misses my point.

RE: Stop the crying.

Who cares what you feel about arithmetic. We all have to do it like many distasteful things in life.

RM: John, put down your hand.

I didn't ask you to close your books as yet.

C. CLASS ACTIVITY QUESTIONNAIRE (C.A.Q.)*

The C.A.Q. instrument is based on Bloom's educational objectives in the cognitive domain, proceeding from the lower thought processes to the more complicated or higher thought processes. It is also concerned with classroom focus and classroom climate. It includes a thirty-item questionnaire given to both teachers and students. There are no right or wrong answers. Teachers are asked to indicate areas of emphasis. Students agree or disagree on various kinds of activities in which they are involved. These factors reveal a profile of the class as well as its purposes. It may also assess whether the teacher is an information giver with students assuming a passive role, or whether students have an active role with the teacher functioning as facilitator.

The following model is adapted from C.A.Q. for use on a sixth-grade level in the Ellington program for the academically talented student.

*Steele, Joe M. Class Activities Questionnaire. Optical Scanning Corporation: Newtown, Pa., 1969.

ELLINGTON PUBLIC SCHOOLS PROGRAM FOR ACADEMICALLY TALENTED

CLASS ACTIVITIES QUESTIONNAIRE (adapted from C.A.Q. by Joe M. Steele)

DIMENSIONS	FACTORS	BRIEF DESCRIPTIONS
LOWER THOUGHT PROCESSES	1. Memory:	Activities calling for recall or recognition of information presented.
	2. Translation:	Activities calling for paraphrasing or expressing information in a different symbolic form.
	3. Interpretation:	Activities calling for recognition of relationships and seeing implications of information.
HIGHER THOUGHT PROCESSES	4. Application:	Activities calling for selection of appropriate methods and performance of operations required by problem situations.
	5. Analysis:	Activities calling for recognition of the structure of material, including the conditions that affect the way it fits together.
	6. Synthesis:	Activities calling for the generation of new ideas and solutions.
	7. Evaluation:	Activities calling for development and application of a set of standards for judging worth.
CLASSROOM FOCUS	8. Discussions:	Student opportunity for and involvement in class discussion.
	9. Test/Grade Stress:	High pressure to produce teacher-selected answers for a grade.
CLASSROOM CLIMATE	10. Enthusiasm:	Student excitement and involvement in class activities.
	11. Independence:	Tolerance for and encouragement of student initiative.
	12. Divergence:	Tolerance for and encouragement of many solutions to problems.
	13. Humor:	Allowance for joking and laughter in the classroom.

14. Ideas Valued: Ideas are seen as more important than grades.

15. Ideas Enjoyed: Subject matter is seen as interesting and enjoyable.

16. Teacher Talk: Proportion of class time consumed by teacher talk.

MEMORY	TRANSLATION	INTERPRETATION	APPLICATION	ANALYSIS	SYNTHESIS	EVALUATION
+	+	+	+	+	+	+
0	0	0	0	0	0	0
-	-	-	-	-	-	-

+ = factor was stressed

0 = undecided

- = factor was not stressed

The graph displays the findings of a questionnaire designed to reveal whether or not a student felt that the factors listed above were stressed in the program.

Comments:

ELLINGTON PUBLIC SCHOOLS
ELLINGTON, CONNECTICUT

PROGRAM FOR ACADEMICALLY TALENTED

Note: The following questionnaire, as used in the Ellington Program, is designed to collect data from students on sixteen specific areas outlined in the model. The instrument is an adaptation of the C.A.Q. by Joe M. Steele.

STUDENT QUESTIONNAIRE

NAME_____ DATE_____

GRADE_____

Please circle either Yes or No after each statement:

1. I am expected to remember or recognize information in this program. Yes No
2. There is little opportunity for me to participate in discussions. Yes No
3. A central concern is practicing methods in life-like situations to develop skill in solving problems. Yes No
4. My major job is make judgments of good/bad, right/wrong, and explain why. Yes No
5. Students do not enjoy the ideas studied in this class. Yes No
6. Great emphasis is placed on memorizing. Yes No
7. Students are encouraged to independently explore and begin new activities. Yes No
8. Great importance is placed on logical reasoning and analysis. Yes No
9. I am expected to go beyond the information given to see what is implied. Yes No
10. I am encouraged to discover as many solutions to problems as possible. Yes No
11. Great importance is placed on explaining and summarizing what is presented. Yes No
12. Inventing, designing, composing, and creating are major activities in this program. Yes No

13. I am expected to read between the lines to find trends and consequences in what is presented. Yes No

14. Students are excited and involved with class activities. Yes No

15. I am urged to build onto what I have learned to produce something brand new. Yes No

16. Restating ideas in your own words is usually required. Yes No

17. The ideas studied in this class are more important than grades. Yes No

18. We actively put methods and ideas to use in new situations. Yes No

19. I have to work harder for grades because I am in this class. Yes No

20. Using logic and reasoning processes to think through complicated problems (and prove the answer) is a major activity in this program. Yes No

21. There is very little joking or laughing in this class. Yes No

22. My major job is to make judgments about the value of issues and ideas. Yes No

23. The class actively participates in discussions. Yes No

Circle one:

24. On the average, the teacher talks how much of the time?

A. 90% B. 75% C. 60% D. 40% E. 25% F. 10%

IV. PRESAGE DESIGN: DESDEG

PRESAGE

Diagnostic and Evaluative Scales for Differential Education for the Gifted*

The DESDEG model is offered as one method for determining the presence and quality of characteristics essential for the success of a gifted program.

> "Although certain aspects of both product and process measurement are implicit in the evaluative instrument, the work may generally be classified as a 'presage' model because it does not depend mainly on the measurement of educational products such as student achievement or interest, or on processes of learning or instruction as the main source of evaluative data. Rather, the various dimensions of the instrument focus primarily on a carefully selected group of program variables that were determined through empirical means individually to be the most necessary and collectively to be a sufficient composite of program features to comprise a valid representation of the whole. Reiterating for the sake of clarity, these program characteristics have been designated as 'Key Features', and the five program characteristics so identified are used in the instrument as central subdivisions around which the evaluation activity proceeds."*

Evaluation of the Key Features occurs when one applies a set of fifteen program requirements, one or more of which is under each of the five Key Features. Each one of the program requirements is deemed essential and they collectively comprise a sufficient set of practices to govern the program. It is recognized that few programs will attain the ideal stature specified in the criteria; however, the existence of upper limits of excellence toward which all efforts should be directed is an obvious purpose.

Each program requirement serves as a focal idea around which a set of five scale standards has been developed. The five degrees of quality are ideal, superior, commendable, neutral, and negative. Numerical values are fixed to each scale standard from a plus three for ideal to a minus one for negative. Thus a sum of scores attained for each PR is also identifiable in a total score to yield a designation ranging from ideal to negative.

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*Renzulli, J. and Ward, V. Diagnostic and Evaluative Scales for Differential Education of the Gifted, 1969.

Each key feature and its program requirement follows:

KF #1 Philosophy and Objectives
PR #1 Existence and adequacy of the document
PR #2 Application of the document
KF #2 Student identification and placement
PR #3 Validity of conception and adequacy of procedures
PR #4 Appropriateness of relationship between capacity and curriculum
KF #3 The Curriculum
PR #5 Relevance of conception
PR #6 Comprehensiveness
PR #7 Articulation
PR #8 Adequacy of instructional facilities
KF #4 The Teacher
PR #9 Selection
PR #10 Training
KF #5 Program Organization and Operation
PR #11 General staff orientation
PR #12 Administrative responsibility and leadership
PR #13 Functional adequacy of the organization
PR #14 Financial allocation
PR #15 Provision for evaluation

In order for evaluators to arrive at the judgments required in the evaluative scales they must have a thorough knowledge and understanding of the program being evaluated.

Basic Information Forms are used to provide an inventory of all factual information that might have a bearing on final judgments and recommendations which they must make. The forms have been designed to be completed by persons within the program, and they require a minimal amount of interpretation on the part of persons providing the data.

There is an Evaluator's Workbook which is intended to assist the evaluator in processing information derived from the Basic Information Forms, and from observations made while visiting the program.

The workbook contains suggestions to the evaluator about arriving at judgments for each of the program requirements. It includes data to scale values, methods of inquiry, and examples of circumstances that may lead to special consideration in assigning scale values to certain areas of the program.

The Summary Report is organized into sections so as to allow evaluative findings and recommendations to be made in relationship to key features and program requirements. An area for a narrative summary and recommendations for each of the program requirements should contain a statement telling why the rating was given, and suggestions for action to bring about an improvement in the program requirements. Provisions are also made to point out the strongest features of the program.

V. TWO COMPREHENSIVE MODELS FOR PROGRAM EVALUATION

A. EASH MODEL

B. KEY FEATURES

THE EASH MODEL OF EVALUATION

As the concern for gifted children in the public schools becomes more and more evident and as services for these students become more widespread, so does the necessity of identifying sound evaluation instruments continue to grow. It is difficult in a field as young as gifted education to find models for evaluation that are useful in both theory and application; however, we have learned of one, proposed in Maurice Eash's "Issues in Evaluation and Accountability in Special Programs for Gifted and Talented Children", that for many intents and purposes might well be pursued. In this paper, Eash attempts to answer three main questions:

1. What are appropriate frameworks for field evaluation as they relate to special education programs?

2. What approach to evaluation methodology is comprehensive and recognizes several levels of evaluation?

3. What role might granting agencies serve in rendering more intelligible the relationship between broad areas of accountability and the evaluation research that makes accountability a valuable and generally accepted constituent of every program?

Eash's major points regarding a framework for field evaluation are that field programs must have the freedom to evolve and clarify objectives as experience becomes the proverbial best teacher (as differentiated from the laboratory research project with its fixed goals and controlled environment) and that the allowance for changes in goals does not eliminate good evaluation procedures if the evaluation is carried out by means of a continuum.

The continuum that Eash suggests is composed of three program models: the initiatory model, in which the planning of goals, specifications and operations is the major process; the developmental model, which is characterized by actual construction and testing of a program in field operation; and the integrated model, whose goals are clear and fixed and whose results can be both predicted and used as data for internal adjustments. With this continuum, then, the evaluator may expect to analyze his program in terms of the particular evaluation criteria ascribed to the different issues presented on each point of the instrument.

The dimensions Eash identifies for consideration in the evaluation process for all three program models are: effort

(how time is spent), effect (products and outcomes), and efficiency (the relationship of the efforts and resources to the effects achieved). By definition, the application of these three factors will be different in each model. For example, the evaluation of effort in the initiatory model might deal only with the efforts of the planning committee, while evaluation of the same dimension in the developmental and integrated models would focus more on program planning and overall design.

As a final note, Eash offers the following suggestions for the use of evaluation guidelines by funding agencies:

1. Innovative program proposals should designate the types of models they will use so that a time sequence may be planned for advancement and change on the continuum.

2. Program proposals should relate the three dimensions of effort, effect and efficiency to the program model with appropriately differentiated emphases.

3. Program model proposals should contain a comprehensive design that will parallel the projected changes in the program model and generate data on performance during the first year of operation.

4. The data produced by the evaluation design should relate to decision makers at several levels, including active program participants and "gatekeepers" (those who direct the resources that give sanction to the program).

5. The program proposal should make provisions for both inside and outside evaluators to evaluate the program and direct attention to improvements and revisions in approach, goals, etc.

The most important feature of Eash's plan for differential evaluation is its direct usefulness to the practitioner and its allowance for, if not prediction of, improvisation and change. In a field where growing pains are the order of the day, it is reassuring to find an evaluation methodology that does not add judgemental insult to experimental injury but rather encourages the process and provides us with calm and collected first aid.

Key Features: A Practical Model for Program Evaluation

by Joseph S. Renzulli, Associate Professor of Educational Psychology, University of Connecticut; Carolyn M. Callahan, Research Assistant, University of Connecticut; and Francis X. Archambault, Assistant Professor of Educational Psychology, Boston University

Renewed interest in educational evaluation has resulted in the recent development of a variety of new models for assessing the quality of instructional programs. Although many of these models represent significant advances in the science of evaluation, administrators and teachers often find them too complicated for practical application without the help of highly trained specialists.

We propose to describe here an evaluation system that a curriculum director—in fact, any educator interested in conducting a program evaluation—can use as a comprehensive, yet easy-to-apply model wherever need may arise for assessment leading to modifications in program organization and operation. We call it the Key Features Model.

Advantages

We believe the Key Features Model has many advantages over others now in common use. To mention only one, the currently popular behavioral objectives model has proved to be appropriate for the assessment of relatively specific student performance, but its emphasis on achievement gains in traditional academic areas limits the kinds of decisions that can be made from the information it supplies. Suppose, for instance, that certain curricular materials or instructional methods are producing teacher discontent, which is having a negative impact on classroom atmosphere and, in turn, on student attitudes and performance. Now, although this teacher discontent may be reflected in the student achievement gains (or lack of them), the behavioral objectives model for evaluation does not provide a mechanism for pinpointing the source of the trouble through direct feedback from the teachers themselves. Thus, an evaluator using the behavioral objectives model may be able to conclude that students are not achieving according to some predetermined expectation, but his data will not help him find out *why* they are not making the expected gains.

The Key Features Model, however, would almost surely disclose the real difficulty (teacher discontent) in our hypothetical case, because it requires the evaluator to investigate *all* the relevant factors bearing directly or indirectly on a particular program's effectiveness. Accordingly, although this model reflects a concern for behavioral objectives and student achievement, it also takes in other important sources of information most helpful for decision making. Let's examine it more closely.

Basic Dimensions

The model's essentials are: Key Features, Prime Interest Groups, and Time. *Key Features* are major factors or variables that contribute to the success of any educational program. The evaluator using this model must first—before he begins to gather data on the program's effectiveness—determine which

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factors (key features) influence the program's operation and contribute most to an understanding of it. Making this determination is probably the evaluator's most important task, but he can do it in a relatively short time if he can enlist the help of persons representing various prime interest groups.

Prime Interest Groups consist of people who have some interest, direct or indirect, in the program to be evaluated. Obviously, such groups will almost always include students, teachers, and parents; but, depending on the nature of the program, they may also involve college admissions officers, prospective employers, and members of boards of education, state departments of education, and certification and funding agencies. One simple way to identify prime interest groups is merely to look at the program's general objectives and ask, "What groups are directly involved in this program or are interested in the students who will be completing it?" If, for example, it's a vocational education program, prime interest groups might include representatives of companies that may employ graduates of the program, members of appropriate trade unions, and persons from agencies responsible for examining or certifying skills taught in the program.

Identifying Key Features

The first step here is to ferret out the major concerns of each prime interest group. It's quite likely that all of the groups will share some of the same concerns, but each one will also have its unique interests. For example, parents, teachers, administrators, and board members would surely be interested in the levels of student achievement under a new social studies program, but administrators and board members would have, in addition, a particular concern about program expenses as these relate to the district budget. For their part, teachers would be interested in how much extra preparation time the new program may require, and students might wonder how much emphasis on current social issues it contains. Thus it's basic to identify the real, relevant concerns of each interest group and to build the data-gathering effort around them.

The evaluator can identify key features by compiling "input" information from four main sources: written materials, questionnaires, interviews, and observation. He should first review all such documents as proposals, courses of study, previous evaluations, curricular materials, etc., and try to learn as much as he can about the general and specific objectives of the program and its mode of operation.

As a second source, he may use open-ended questionnaires that ask a small sample of each prime interest group to list their main concerns about the program. A good approach is simply to ask what each one would "look at" if he were evaluating the program. Whenever possible, questionnaires should be *kept* anonymous, and the instructions for completing them should make it clear that no attempt will be made to identify suppliers of information.

After he has reviewed program documents and the questionnaires, the evaluator will begin to get a "feel" for both the obvious and the subtle concerns of the various prime interest groups. Then he can proceed to the third step: arranging interviews with members of each group. Knowledge gained in the first two steps will help him ask meaningful questions about concerns expressed frequently. His success here, of course, will depend on how well he's able to gain the trust of his interviewees. He should guarantee their anonymity and make sure they understand his role as spokesman or ombudsman for those being served by the program.

Finally, the evaluator should observe the program in action, try to "get inside" it by viewing it from the perspectives of students, teachers, and members of other prime interest groups. Informal interviews and friendly chats will help him understand the day-to-day operation of the program and clarify or verify some of the concerns identified through previous input procedures.

At this point, the evaluator should be able to list the major concerns of each prime interest group. He should now classify these and list each category along the Key Features dimension of the evaluation model. (See Figure 1 on looseleaf insert.) Similarly, along the Prime Interest Groups dimension he should list all those in any way concerned with the program, placing a check mark in each box that represents a possible source of evaluative data. For example, if both students and parents can contribute information on, say, "Student Attitudes Toward the Pro-

gram," the evaluator should make check marks in the boxes where this key feature and each of these two prime interest groups intersect.

The advantage of listing all possible sources of data is that it creates an awareness of the various perspectives from which a program can be evaluated (Gooler, 1969). (Later, the evaluator can review the entire range of possibilities and select those he feels will contribute the most useful information.) Furthermore, the comprehensive overview will help the evaluator to avoid overburdening any one group with requests for evaluative data.

Appropriate Instruments

After identification of data sources for each key feature, the evaluator's next step is to select and construct instruments that will "deliver" the information required for decision making. The type of instrument used to evaluate a given program may cut across measures of cognitive growth, affective growth, and classroom atmosphere, and may range from formal standardized tests to informal interview schedules. Careful selection and development of instruments for each key feature, data source, and time of administration are essential to an accurate, comprehensive evaluation. It's at this point that the evaluator must begin to translate previously obtained data into appropriate instrumentation.

What instruments are available? For measuring cognitive abilities, there are standardized achievement tests, tests of critical thinking, aptitude tests, and tests of problem-solving ability. There are fewer standardized tests for areas in the affective domain, but some rating scales and personality tests may be applicable in certain instances. Classroom atmosphere can be evaluated by use of such instruments as the *Class Activities Questionnaire* (Steele, 1969), the *Observation Schedule and Record* (Medley and Metzel, 1958), and Flanders' interaction analysis procedures (1960). There are also standardized tests of creative thinking, such as the *Torrance Tests of Creative Thinking* (1966) and the *Remote Associates Test* (Mednick, 1967), as well as tests of artistic aptitude like the *Design Judgment Test* (Graves, 1948).

Nonstandardized tests, rating scales, questionnaires, interview schedules, and observation techniques are often included in the assessment of objectives for which no standardized measures exist. In constructing questionnaires and rating scales, the evaluator should try to take into account the concerns expressed by each prime interest group during the input phase. His major task here is to give accurate representation to each concern on one or more of the questionnaire items, and to determine the extent to which this concern exists within a large representative sample of each prime interest group.

Existing school records may influence selection of some instruments. For instance, if the evaluation design calls for standardized measurement of reading achievement and the school has already administered a particular achievement test in reading, it's reasonable to use those test scores as pretest data—provided, of course, the test accurately reflects the objectives of the program under evaluation.

Special caution has to be exercised in using evaluation measures for programs serving exceptional children. Tests standardized on homogeneous groups may be inappropriate for special populations. If used, they may generate such problems as regression to the mean, which would have to be considered in the evaluation. Other difficulties arise from using achievement and aptitude tests to measure the typically higher-level objectives and the unique learning experiences of gifted or creative pupils as well as the specialized objectives of slow learners or mentally retarded children. Standardized tests often fail to yield valid measures of growth at these extremes. Consequently, it may be necessary to seek out special instruments or to rely on carefully constructed teacher-made tests in such cases.

The Time Dimension

The third dimension of this model is a key to the best utilization of the evaluator's time and to the optimal functioning of the overall evaluation system. Traditional models, including the above-mentioned behavioral objectives model, rely heavily on the classical pretest/posttest design. A more effective model will incorporate both formative and summative evaluation—i.e., pretest and posttest data will be gathered and analyzed, but data collection will also occur at interim points *during* the program's operation. This helps to detect adverse situations or practices before the final collection of posttest data. A

particular program, for example, might require busing students from one school to another, and this might cause emotional problems in youngsters thus separated from familiar surroundings and deprived of after-school playtime. Questionnaires and/or interviews with students and parents early in the program's operation would yield feedback helpful in identifying the problem *before* collection and analysis of posttest information. It goes without saying, nevertheless, that pretest and posttest data are essential to the final or summative evaluation of any program.

Completion of the time dimension of the model will provide a year-long plan that will help the evaluator gather specified data at appropriate intervals. He should prepare a separate matrix for each month of the program's operation and indicate on it the kind of data to be gathered during that month. (See Figure 2 on looseleaf insert.)

In filling out the cells on a given matrix, the evaluator should consider whether or not *this* prime interest group can supply appropriate information about *this* key feature at *this* time. For example, an evaluator of a work-study program who calls for executives of the employing firms to return a questionnaire every month is almost sure to find it difficult, if not impossible, to gather data from this source. In fact, such procedures may alienate a prime interest group to the point of endangering a program's success. Similarly, overtesting of students may produce a reaction that would make meaningful interpretation of test results impossible. And overall, it sometimes happens that negative feelings about evaluation are easily projected onto the program itself.

Analyzing and Synthesizing Findings

After he has set up his evaluation model, the evaluator's responsibility centers on analyzing each set of data, on synthesizing the data about each key feature, and on providing administrators and staff with feedback. Appropriate methods of data analysis include descriptive and enumerative statistics (percentages, means, standard deviations, grade scores, etc.) as well as parametric and nonparametric statistical tests calling attention to significant differences between various sets of data. The evaluator should keep in mind the various levels of sophistication among the persons to whom he's reporting and present the data in ways everyone can understand. Whenever possible, statistical information should be given in tabular, graphic, and narrative forms, and every effort should be made to simplify the interpretation of complicated statistical findings.

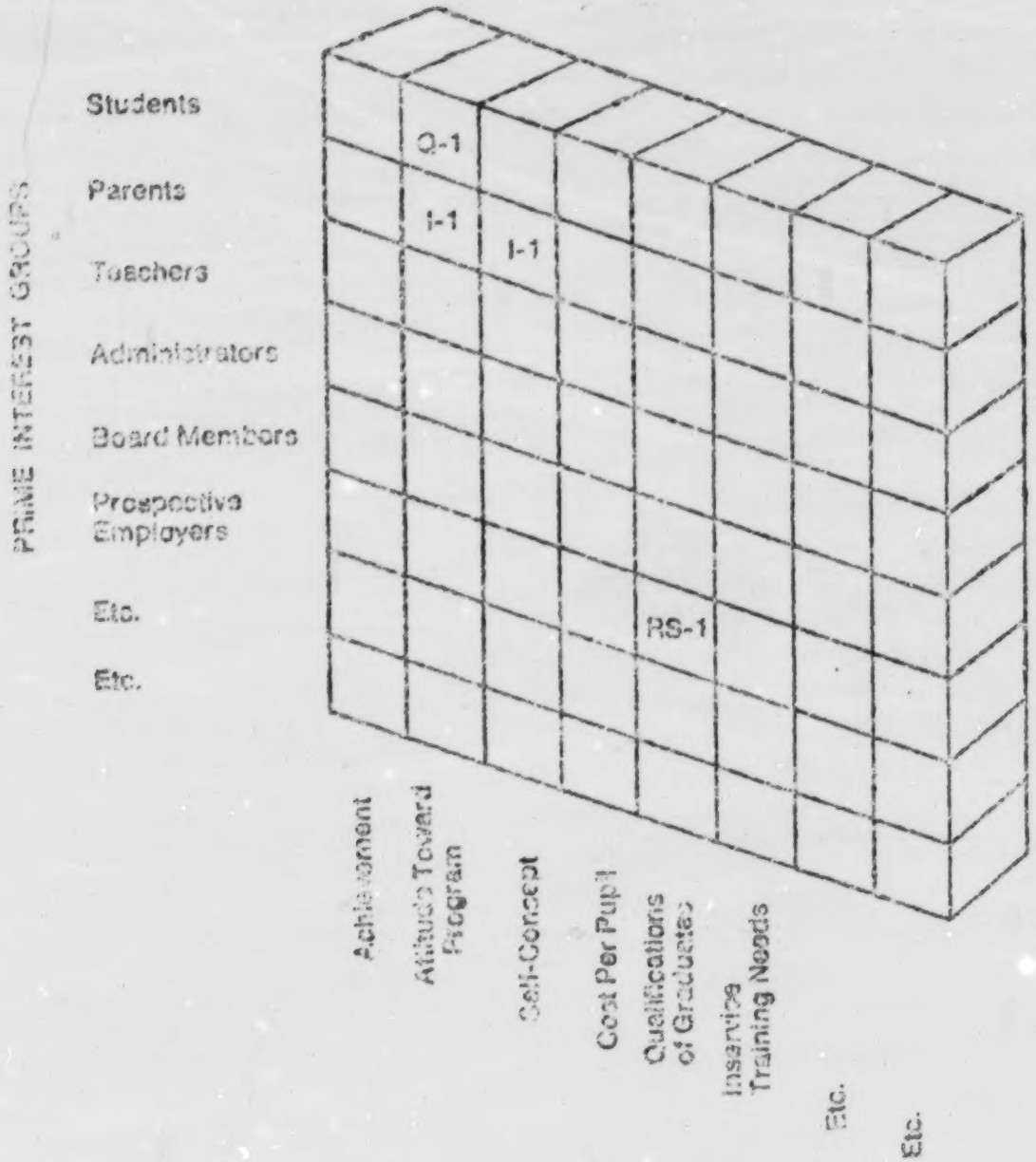
A valuable but often neglected form of evaluative reporting is the presentation of oral or written comments from persons responding to interviews and questionnaires. Such comments should be analyzed for frequency and general trends, then summarized in the evaluation reports. Sometimes it's effective to include verbatim statements that typify the thoughts and feelings of particular groups.

The Key Features Model is designed to facilitate the processes of synthesizing evaluative data and disseminating information to be used in decision making. The evaluator builds his reports, both formative and summative, around each key feature, and attempts to show how information from each prime interest group has led to a given conclusion and recommendation. He emphasizes points of agreement and disagreement among the groups and provides a rationale for each of his recommendations. Whenever possible, he lists alternative courses of action that range from the ideal to the most practical and easy. Finally, he makes sure that his report includes realistic recommendations (as measured against available funds and other resources) for immediate implementation as well as suggestions for long-range development of an ideal program.

If, then, as someone has said, "evaluation is the art of collecting information for the purpose of rational decision making," we believe the Key Features Model gives the educator a simple but comprehensive instrument for the practical exercise of this art.

PRIME INTEREST GROUPS
Students
Parents
Teachers
Administrators
Board Members
Prospective Employers
Etc.
Etc.
KEY FEATURES
Achievement
Attitude Toward Program
Self-Concept
Cost Per Pupil
Qualifications of Graduates
Inservice Training Needs
Etc.
Etc.
TIME
September
October
November
Etc.

FIGURE 1



KEY

ACH-1 indicates an achievement pretest.
Q-1 indicates the first questionnaire.
RS-1 indicates the first rating scale.
I-1 indicates the first interview.

Figure 2

The following represent techniques used to evaluate Gifted Programs according to key features: A Practical Model for Program Evaluation

PROJECT GIFTED - WARWICK
1972-1973
Parent Questionnaire

Directions: Please do not sign your name to this questionnaire. No attempt will be made to identify persons completing these forms. Please return the quesionnaire in the enclosed envelope within the next two or three days.

You can help to make Project Gifted a better program by giving careful thought to each of the questions that follow. Because of the relatively small number of persons involved in the project, each person's opinions will weigh heavily in analyzing the results. We appreciate your ccoperation and assistance in helping us to evaluate Project Gifted.

	Yes	No
1. Have you been provided with enough information about why your child was selected for Project Gifted?	_____	_____
2. Have you been provided with enough information about the objectives of Project Gifted?	_____	_____
3. Have you been provided with enough information about the activities and experiences that your child pursues in Project Gifted?	_____	_____
4. Have you been invited to visit the Project Gifted classroom?	_____	_____
5. Have you been offered sufficient opportunity to discuss your child;s progress with the teacher?	_____	_____

6. Which of the following comments best expresses your child's general attitude about being in Project Gifted?
   - Enthusiastic _____
   - Positive _____
   - Indifferent _____
   - Negative _____

7. Has your child expressed pleasure or enjoyment about the work that he or she does in Project Gifted? (check one)
   - Often _____
   - Sometimes _____
   - Seldom _____
   - Never _____

8. Which of the following statements best expresses your child's attitude toward the degree of challenge of the work in Project Gifted?
   - Very challenging _____
   - Somewhat challenging _____
   - Not at all challenging _____
   - No answer _____

	Yes	No
9. Has your child encountered any problems with his friends as a result of being involved in Project Gifted? If Yes, please describe.	_____	_____
10. Do you think that the name, "Project Gifted" calls unnecessary attention to the children participating in the program?	_____	_____
11. Have you or your child encountered any problems as a result of being transported to another school? If Yes, please describe.	_____	_____
12. Has your child expressed a concern about missing work in the regular class or making-up assignments bdcause he is out of the room to attend Project Gifted?	_____	_____
13. Has your child's regular classroom teacher(s) expressed any displeasure because your child has missed work because he or she is attending Project Gifted? If Yes, please describe.	_____	_____
14. If your child is invited to participate in Project Gifted next year will you encourage him to do so? If No, tell why.	_____	_____
15. Can you identify any changes in your child's behavior or attitude toward school or education which seem to result from his or her participation in Project Gifted? If Yes, please describe.	_____	_____
16. Do you have any specific suggestions for changes in the operation of Project Gifted or the way it affects children or their parents?		

Number of years your child has been in Project Gifted _____

PROJECT GIFTED

Student Questionnaire

DO NOT SIGN YOUR NAME.

Please answer by placing an X in the column that best expresses your opinion.

	YES	NO	UNDECIDED
1. I enjoy coming to Project Gifted.	___	___	___
2. The subjects we study in Project Gifted are interesting to me.	___	___	___
3. I can learn more in small classes.	___	___	___
4. The work we do in Project Gifted is too easy.	___	___	___
5. I have time in Project Gifted to study things that are of interest to me.	___	___	___
6. I like the way my teacher teaches this class.	___	___	___
7. I get more individual attention in Project Gifted than I do in my regular class.	___	___	___
8. The speakers who have visited our class are interesting.	___	___	___
9. I enjoy being with the other students in my Project Gifted class.	___	___	___
10. If you had a younger brother or sister in the third grade, and the school invited him or her to be in Project Gifted, would you advise him or her to be in the class?	___	___	___

11. What did you like best about Project Gifted?

11a. Why?

12. What did you like least about Project Gifted?

12a. Why?

13. Has Project Gifted helped you or hurt you in any way? (Check one)

_____ Helped
_____ Hurt
_____ Undecided

13a. Please explain your above answer.

14. If you could change Project Gifted in any way, what would you change about it?

WARWICK PUBLIC SCHOOLS
WARWICK, RHODE ISLAND

PROJECT UNITED

Evaluation Scale for Visual Arts

Code No._____ Age_____ Boy/Girl_____ TOTAL SCORE_____

Evaluator_____ Position_____ Date_____

Elements	Low		Moderate		High	
	1	2	3	4	5	6
I. Creative Expression, Imagination, Uniqueness						
II. Flexibility, Appreciation and Adaptability to Various Media						
III. Fluency Variety of Number of Ideas						
IV. Sensitivity-Composition-Design						
V. Manipulative Skills Construction-Weaving, etc.						
VI. Growth						
Column Total						
Weight	1	2	3	4	5	6
Weighted Column Total						
					TOTAL SCORE	

WARWICK PUBLIC SCHOOLS
WARWICK, RHODE ISLAND

PROJECT GIFTED
Evaluation Scale for Creative Writing

Code No._____ Age_____ Boy/Girl_____ TOTAL SCORE_____

Evaluator_____ Position_____ Date_____

Elements	Low		Moderate		High	
	1	2	3	4	5	6
I. Organization Unity, development, clarity						
II. Mechanics Structure, grammar, usage Skills: spelling, punctuation						
III. Originality Creative fluency, emotional quality, imagination, style, theme						
IV. Unusual/Other Elements Dialogue, special format mood/setting, character development						
V. Growth						
Column Total						
Weight	1	2	3	4	5	6
Weighted Column Total						
					TOTAL SCORE	

VI. SAMPLES OF EVALUATION INSTRUMENTS FROM LOCAL DISTRICT GIFTED PROGRAMS: NON-STANDARDIZED INSTRUMENTS

Avon, Connecticut

AVON MIDDLE SCHOOL GIFTED PROGRAM EVALUATION

General Comments

1. This program was designed to include 3% (30 students) of grades 6, 7, and 8 in both Canton and Avon. Initial enrollment was almost 4% (37 students). Attrition due to lack of interest and/or other school pressures resulted in 4 Avon students and 2 Canton students leaving the program. We currently have 31 students.
2. Regionalization on a part-time basis is extremely difficult to administer. The communications problems between all persons concerned with any one student are staggering. To be done effectively requires a tremendous expenditure of time and effort.
3. Funds should be available during a school year to buy various books and equipment necessary to meet the changing interests and needs of the students.
4. Consideration should be given to a shift of emphasis in this program from a small group selected on a basis of I. Q., performance on standardized achievement tests, and teacher recommendations based on general ability to a larger and more fluid group of students who have demonstrated interest and motivation in the classroom in any given area or a specific topic. This involves philosophical and theoretical considerations better pursued at a meeting.

Grade equivalent_____

Check one: Boy_____ Girl_____

Avon_____ Canton_____

QUESTIONNAIRE FOR TEACHERS

Please help us evaluate our new Special Program for Gifted children at the Avon Middle School by answering the following questions:

1. Do you feel this student has adjusted successfully to the mechanics of the program? Yes___No___

2. Do you believe any special stigma or problem has developed because this student has participated in this program? Yes___No___

3. Do you feel this student's regular classroom work has deteriorated because of participation in our program? Yes___No___

4. Does this student seem more interested in education because of involvement in our program? Yes___No___

5. Do you feel this student has been challenged to higher levels of independent study through participation in this program? Yes___No___

6. Has your job been complicated by having students in this program? Yes___No___

7. If yes, how?_____

_____

8. Do you feel better communication is needed between Canton and Avon? Yes___No___

Although we would prefer that you identify your responses, it is not mandatory that you enter your name or the name of your student.

If you have further ideas or opinions concerning this subject, we would appreciate your sharing them with us. Please return this questionnaire by Friday, January 15, 1971.

Comments:

_____

Teacher's Signature

AVON MIDDLE SCHOOL GIFTED PROGRAM EVALUATION

Interpretation of Teacher Survey

Most teachers filled out several questionnaires, one for each student involved in our program in his or her class. The tabulations were made for each of these students for Questions 1 through 5. Questions 5, 6, and 7 apply to teacher reaction; therefore, just one reply per teacher was tabulated.

1. Most teachers feel the students have adjusted successfully to the mechanics of the program.

2. Most teachers do not believe any special problem or stigma has developed for students participating in our program.

3. Deterioration of regular classroom work was minimal.

4. Question: Does this student seem more interested in education because of involvement in our program?

5. Question: Do you feel this student has been challenged to higher levels of independent study through participation in this program? There is a noticeable difference of reaction to these two queries between Avon and Canton teachers. It may be helpful to show the tabulations here and then make some generalizations.

	AVON				CANTON			
	Yes	No	Not Sure	No Answer	Yes	No	Not Sure	No Answer
4.	15	6	3	10	25	13	4	2
5.	16	6	-	12	26	12	2	4

Avon teachers said they had difficulty with question 4 because the students were new to them this year and started this fall with a high degree of interest in learning. An increased degree of interest would be difficult to determine.

Answers by Avon teachers to No. 5 were qualified by statements indicating that extra work was not done in the teacher's particular discipline. To discuss the philosophy of higher levels of thinking versus increased production would require a treatise beyond the scope of this survey. Perhaps an opportunity to discuss this with the School Board and administration could be arranged if clarification is desired.

6. and 7. The program has not worked a hardship on teachers.

8. Canton teachers definitely would like better communication with Avon about the program.

Grade equivalent_____

Check one: Boy_____Girl_____

Avon____Canton____

QUESTIONNAIRE FOR PARENTS

Please help us evaluate our new Special Program for Gifted children at the Avon Middle School by answering the following questions:

1. Has your child said anything at home about the special program at the Middle School? Yes__No__

2. From what he/she has said, does he/she seem to like it? Yes__No__

3. Does your child seem more interested in education because of his/her involvement in the program? Yes__No__

4. Do you believe your child has adjusted to the mechanics of the program successfully? Yes__No__

5. Do you feel that your child has been challenged to higher levels of independent study through participation in this program? Yes__No__

6. Do you believe there has been any special stigma or problems developed because your child has participated in this program? Yes__No__

7. Would you like to see the program for gifted children at the Avon Middle School continued next year? Yes__No__

Although we would prefer that you identify your responses, it is not mandatory that you enter your name or the name of your child.

If you have further ideas or opinions concerning this subject, we would appreciate your sharing them with us. Please return this questionnaire by Friday, January 15, 1971.

Comments:

_____
Parent's Signature

AVON MIDDLE SCHOOL GIFTED PROGRAM EVALUATION

Interpretation of Parent Survey

1. All of the students have discussed the program with their parents.

2. Of parents reporting, 88% say the children like the program.

3. There were mixed feelings about a heightened interest in education due to this program. Perhaps the question was poor because these students have always been interested in learning, leaving little room for a greater degree of interest.

4. With one exception parents feel the students have adjusted to the mechanics of the program.

5. Of 18 parents reporting, 72% felt their child was challenged to higher levels of independent study, 17% answered negatively, and 11% did not answer. One in the last category felt the length of time in the program had not been sufficient to warrant judgment.

6. Only 2 parents felt their child had suffered stigma because of inclusion in the program.

7. 88% of the parents answering desire that this program be continued next year. One parent answered negatively and one did not answer, stating it would depend on the pressure of regular school work at the junior high level.

Grade equivalent_____ Check one: Boy__Girl__ Avon__Canton__

QUESTIONNAIRE FOR STUDENTS

Please help us evaluate our new Special Program for Gifted children at the Avon Middle School by answering the following questions:

1. What do you understand is the objective or purpose of this experimental education class:

_____

_____

2. Have you had an opportunity to do independent work? Yes__No__

3. Have you done any independent work? Yes__No__
If not, why?_____

_____

4. Would you prefer having more assigned work? Yes__No__

5. What do you enjoy about the program?_____

_____

6. What do you dislike?_____

_____

7. Do you feel being in this program causes you to miss important school work? Yes__No__

8. Do your classmates resent or tease you for being in this program? Yes__No__

9. FOR CANTON STUDENTS ONLY. Does the transportation to Avon disturb you? Yes__No__

10. Would you like to be in this program next year? Yes__No__

Although we would prefer that you identify your response, it is not mandatory that you enter your name.

If you have further ideas or opinions concerning this subject, we would appreciate your sharing them with us.

Comments:

_____
Student's Signature

AVON MIDDLE SCHOOL GIFTED PROGRAM EVALUATION

Interpretation of Student Survey

1. The students generally understand the objective of this program, namely, self-motivation and development of skills necessary to pursue their own projects and areas of interest.

2. The program offers opportunity and proper atmosphere for independent study.

3. Most students are doing independent work. A few are still floundering, but the teacher works with these students regularly, searching for interest areas and developing the confidence and maturity necessary for independent study.

4. Almost unanimously the students do not desire prescribed, structured work.

5. Students like:

Freedom to pursue interests	16
Independent work	4
Science Center	3
Resource Center	4
Camera Work	1
Different activities	2

6. Students dislike:

Not enough time for independent work	5
Coercion to do something	1
Group work	1
Lack of equipment	3
Keeping notes	1
Boredom at times	2
Missing quizzes	3
Too much talking	1
Periods too long	1
Deciding on project	1
Study skills work	1
Missing classes	1
Structured work	3
Guidance session	2
Resource Center	1

7. Some feel they miss important school work. Communication between the classroom teachers and the teacher of the gifted is essential. Whenever a student falls behind in regular class work or feels the need to attend a regular class presentation, necessary arrangements have been made for Avon students. The Canton students have a more complicated problem.

AVON MIDDLE SCHOOL GIFTED PROGRAM EVALUATION (Continued)

8. Some students in this program feel prejudice but have borne the pressure well with no apparent stigma.

9. Some Canton students dislike having to be transported to Avon, but this is not a real problem.

10. There is an overwhelming desire on the part of the students for a continuation of the program next year.

SPECIAL EDUCATION QUESTIONNAIRE

(Gifted) Avon Middle School

1. How would you describe the role of the teacher(s) in the Special Education program?

2. What do you think are/were the objectives or purposes of the program?

3. How does/did the program succeed in achieving its goals or purposes?

4. How does/did the program fail to achieve its goals and objectives?

5. What suggestions do you have for improving the program?

6. In what grades were you in the program? Sixth_____

Seventh_____

Eighth_____

7. List the projects you did that were most important to you.

8. What else would you like to say about the program?

EAST HADDAM, CONNECTICUT

Evaluation Procedure

How did the program meet these six criteria?

I. Did you accomplish the program's objectives?

II. Any objectives not achieved?

III. Most successful areas of the program.

IV. Most unsuccessful area of the program.

V. Unusual phase of program.

VI. Areas recommended for next year.

Areas to be deleted or amended.

EAST LYME, CONNECTICUT

ENRICHMENT PROGRAM

EAST LYME PUBLIC SCHOOLS

Student Evaluation

Name _____ Grade _____

School Attending _____ Years in Program _____

Term of Evaluation _____

	Excellent	Good	Improvement Needed	Not Observed
1. Memory - Proficiency in recalling or reorganizing information presented				
2. Translation - Ability to paraphrase or express information in different symbolic forms				
3. Interpretation - Ability to recognize relationships and implication in information				
4. Application - Is able to select appropriate methods and perform operations required by problem situations				
5. Analysis - Is able to recognize structure in material including the conditions that effect the way it fits together				
6. Synthesis - Is able to generate new ideas and solutions				
7. Evaluation - Is able to develop and apply a set of standards for judging worth				
8. Discussion - Becomes involved in group discussion				
9. Enthusiasm - Expresses excitement or involvement in class activities				
10. Independence - Express individual initiative				
11. Divergence - Seeks different solutions				
12. Ideas valued - Ideas are seen as important				
13. Ideas enjoyed - Ideas are seen as interesting to discuss				

EAST LYME, CONNECTICUT (Continued)

Enrichment Program - Student Evaluation

14. Additional comments: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____
Signature of Evaluator

_____
Date

ELLINGTON, CONNECTICUT

ELLINGTON PUBLIC SCHOOLS

PROGRAM FOR ACADEMICALLY TALENTED

VISITATION FOLLOW-UP QUESTIONNAIRE

This questionnaire is a follow-up activity resulting from your visit to the Program for the Academically Talented.

1. Would you feel that you could serve as a resource person if the scheduling could be arranged?

   YES_____ NO_____

2. In what area(s) do you feel you could serve as a resource person?

   _____

   _____

3. Are there occasions where our resources would complement your curriculum? Please comment. _____

   _____

   _____

   _____

4. Suggest ways in which the Program for the Academically Talented can better serve the needs of its children at your grade level.

   _____

   _____

   _____

   _____

_____ _____

Date Name

ELLINGTON, CONNECTICUT

ELLINGTON PUBLIC SCHOOLS

PROGRAM FOR ACADEMICALLY TALENTED

MID-YEAR REPORT

19___

NAME: _____ GRADE: _____

ACTIVITIES PURSUED:

SOCIAL BEHAVIORS:

Your child

_____ contributes to class activities.

_____ relates well with peers.

_____ accepts decisions of others.

_____ cooperates with us.

ACADEMIC BEHAVIOR:

Your child

_____ has the ability to initiate and organize independent projects.

_____ makes adequate use of time and resources.

_____ discusses progress and requests needed materials.

_____ sincerely attempts to complete planned projects.

_____ analyzes and evaluates success or failure.

Note: Please feel free to visit at any class time. If a conference is desirable, arrangements may be made with us.

Frank Milbury
Irene Dowd

NORWALK, CONNECTICUT

Art Department
Board of Education
Norwalk, Connecticut

Creative Child Program
Mrs. Frances Hall
Mr. Melvin Minthorn
Dr. Donald Rogers

Dear Parent:

Your child, _____, has been participating in a cooperative city and state funded art program at _____ School. An evaluation of this program is required by the Conn. State Department of Education. Part of the evaluation process is the completion of a questionnaire to parents.

We would appreciate your cooperation in answering the following questions:

I. Interest

Did your child show more than usual interest in doing art work at home? How was this interest displayed?

Accomplishment

II. Since drawing is stressed in the Creative Arts Program, you may have observed in your child an increased security about drawing different things, drawing more frequently, or even noticed an improvement in drawing ability. Please comment.

III. We teach the use of color in many different ways in the Creative Arts Program. Have you noticed any improvement in your child's use of color, such as - using color more imaginatively, painting with "different" colors, or perhaps just using color more freely than previously? Please comment.

IV. Painting and Design

Both real and non-real "subjects" or designs are encouraged in the Creative Arts classes. You may have observed that your child is more willing to express himself freely using either design and realism, paints more frequently, or has begun to extend his creativity into other areas of interest. Please comment.

NORWALK, CONNECTICUT

Art Department - Continued

V. Spontaneity

One of our major goals is to encourage each child to work independently, use more originality, and paint more spontaneously (with less hesitation and pondering over what to do and how to do it). Please comment upon any clues that you may have observed to this effect.

You may wish to write other comments that were not brought out by the questionnaire.

DR/br
4/10/74

NORWALK, CONNECTICUT

Evaluation

STUDENT _____

DATE _____

This evaluation serves the function of aiding teacher and parent in better understanding learning characteristics of the student as displayed in the special class.

Check indicates student's pattern.

HIGHER LEVELS OF THINKING

_____ senses problems

_____ takes ideas apart

_____ thinks through problems in a logical fashion

_____ generates many ideas and solutions to problems

_____ generates unique ideas or solutions to problems

_____ has the ability to evaluate ideas

MOTIVATIONAL CHARACTERISTICS

_____ self starter and learner

_____ needs some teacher direction

_____ always needs teacher direction

_____ pursues challenging material

_____ follows through on plans

_____ has difficulty following through on plans

NORWALK, CONNECTICUT

Evaluation (Continued)

LEARNING STYLE

_____ works independently

_____ works with one other person

_____ works within a small group

_____ works only as part of a large team

INTERPERSONAL RELATIONSHIPS

_____ relates well to peer group

_____ has difficulty relating to peer group

_____ contributes to group discussions

RESPONSE TO THE FORMAT OF THE CLASS

_____ enjoys coming, relaxed

_____ uninterested, uncomfortable

_____ becomes truly involved in undertakings

_____ moderate amount of involvement in undertakings

INDEPENDENT STUDIES:

Teacher_____

NORWALK, CONNECTICUT

Evaluation (Continued)

The basis for evaluating growth in quality of the art products will be judged by comparing initial and final pupil products by randomly mixing these and having several judges rate these on a scale based upon specific criteria. The medians of the judges' ratings between initial and final art products will be evaluated statistically for significance.

Parent questionnaires will serve to collect data concerning the influence of the creative class on the pupil in outside of school situations. Teacher judgments and anecdotal records will be recorded for each pupil and statements of pupil growth will be included.

CREATIVE CHILD PROJECT

Name _____ Date _____

School _____ Middle School _____

	Dates	Comments
Oil Painting		Originality
Acrylics		
Tempera		
Water Color		General Ability
Linoleum Printing		
Sculpture		
Enameling		Strengths & Needs
Drawing		

SIMSBURY, CONNECTICUT

PROGRAM FOR INTELLECTUALLY GIFTED STUDENTS

June, 1973

Dear Teachers and Administrators:

The program for intellectually gifted students is completing its first year in which all the elementary schools were involved. Your answers to the following questions will be of help to us in determining the effect and efficiency of the program.
Thank you for your cooperation.

Sincerely,
Patricia Ciabotti
Gerald Rourke
Marion Sandalls

School _____ Position (Grade) _____ Name (optional) _____

1. I feel that the IG Program at my school has been

_____ excellent _____ fair
_____ good _____ a waste of time

2. I feel that way because:

_____ of the identification process
_____ the children don't need it
_____ the children do need it
_____ I don't understand what the purpose of the program is
_____ the teaching strategies are challenging
_____ the children miss too much classwork
_____ scheduling
_____ of the administration of the program in my building
_____ of the IG program
_____ of the teacher of the IG program
_____ of the activities of the IG program
_____ of other reasons such as _____
_____

3. The IG students' attitudes in my class have been

_____ negative _____ positive

SIMSBURY, CONNECTICUT

Program for Intellectually Gifted Students (Continued)

4. This seems to be because of:

_____ peer pressure	_____ the identification process
_____ work pressure	_____ the IG teacher
_____ the schedule	_____ the IG curriculum
_____ other reason: _____	

5. In general I feel that the children benefited from their participation in the program.

_____ considerably _____ somewhat _____ not at all

6. Before the program started my own attitude was:

_____ positive _____ negative _____ neutral

7. Now my attitude is:

_____ positive _____ negative _____ neutral

8. I have visited the IG classroom:

_____ often _____ sometimes _____ never

9. I have used ideas suggested by the teacher of the IG program:

_____ often _____ sometimes _____ never

10. My recommendations for the program are:

Please complete and return to the school office by June 8, 1973.

SIMSBURY, CONNECTICUT

PROGRAM FOR INTELLECTUALLY GIFTED STUDENTS
June, 1973

Dear Parents:

Your son/daughter has participated at least half a year in the program for intellectually gifted students. Your answers to the following questions will be of help in determining the effect and efficiency of the program.

Thank you for your cooperation.

Sincerely,
Patricia Ciabotti
Gerald Rourke
Marion Sandalls

School _____ Grade of son/daughter _____ Parents' names (optional) _____

	Often	Occasionally	Never
1. Our son/daughter:			
a. discusses the program with us at home	____	____	____
b. speaks favorably when discussing the program	____	____	____
c. speaks negatively when discussing the program	____	____	____
2. The program:			
a. appears to have created academic pressure	____	____	____
b. appears to have stimulated him/her to do better work	____	____	____
c. appears to interfere with his/her regular class work	____	____	____

3. Do you feel that your youngster's attitude toward school in general has been affected by his participation in the program? Please explain in what ways.

4. What is your personal opinion of the program as it relates to your child? Has it had a positive or a negative effect on his self image?

Please complete and return to the school office by June 8.

SIMSBURY, CONNECTICUT

SPECIAL ACTIVITIES PROGRAM SERVICES
June, 1973

To the students in the Special Program:
You have completed at least a half-year in the Special Activities Program. Your answers to the following questions will be of help in determining what has been accomplished.

_____ _____ _____
School Grade Student's Name (optional)

1. Check the items that you think tell part of the purpose of the Special Activities program.

_____ using your imagination	_____ sharing your ideas
_____ memorizing facts	_____ listening to the ideas of others
_____ having fun	_____ disciplining your mind
_____ expressing your own views and feelings	_____ being creative
_____ getting out of your regular class	_____ finding the correct answer to questions
_____ learning how to think harder and better	_____ thinking in a different way
_____ being creative	_____ thinking of new ways of doing familiar things

If something has not been mentioned that is part of the purpose of the program, add it here:

_____

2. Check the column that best tells how you feel about the program.

My participation in the program has:	Often	Occasionally	Never
a. added to my homework load	_____	_____	_____
b. helped me perform better in my regular class	_____	_____	_____
c. interfered with my regular classwork	_____	_____	_____
d. caused trouble between my friends and me	_____	_____	_____

SIMSBURY, CONNECTICUT

Special Activities Program Services (Continued)

	Often	Occasionally	Never
e. helps me get along better with people	____	____	____
f. made me more curious	____	____	____
g. made me more imaginative	____	____	____
h. made me more logical	____	____	____
i. made me more sensitive to others	____	____	____
j. improved my sense of responsibility	____	____	____
k. made me think about my own future	____	____	____

3. Check the items that you would like to see changed in the Special Activities Program.

____ schedule ____ teacher ____ activities

Explain:

Please complete and ask your teacher to return to the school office by June 8.

SOUTHINGTON, CONNECTICUT

SOUTHINGTON PUBLIC SCHOOLS

The evaluative instruments for the Talented program in the Southington Public School System is basically a series of questions. We do not feel that there will be any marked change in the ability of students as shown by standardized measures. Therefore, our concern is a measure of how well we are doing based on the program objectives we proposed.

The evaluation of this program will be on two levels, A) Individual student evaluation report and B) Overall program evaluation.

Students will be given no official grades for their involvement in this program. However, at the end of each quarter students will be given an in-depth assessment of their work-to-date by the teachers. These assessments will contain written evaluations of the student's ability to:

1. Think critically
2. Think divergently
3. Integrate academic areas
4. Follow through a plan
5. Clearly identify project(s) to be completed
6. Work with others (if applicable)
7. Show academic progress
8. Enjoy the experience

A comparison of the percentile rankings made by students on the Iowa Test of Basic Skills, composite score, will be made to determine if students maintained a percentile score equal to or greater than their initial composite score. No credit will be given the talented program if students do indeed maintain their percentile ranks, but we want to be assured that students are not minimizing their chances to score nigh on standardized tests as a result of our program.

The real measure of this program's success will be assessed through a narrative evaluation based on the following criteria:

1. Did the students' projects show signs of in-depth study and creativity?
2. Did the students design, develop and carry through on projects of their interest?
3. Did the students enjoy the experiences they went through?
4. What percentages of the students were able to carry on and complete individually guided projects?
5. What was the variety of projects shown?
6. Were classroom teachers satisfied with the students experiences?
7. What did the parents think of the program?
8. In what ways were community resources used?
9. Were students more interested in working in small groups or individually?

Dr. A. T. Lederman
Director of Secondary Education

TALCOTT MOUNTAIN SCIENCE CENTER MONTEVIDEO ROAD AVON, CONNECTICUT

EVALUATION FORM*

"Horizons Unlimited" "The Sky Is The Limit"

"Horizons Unlimited" and "The Sky is The Limit" are independent study programs for academically gifted students in grades 4-6 and 7-12 respectively. The programs meet on Saturdays at the Talcott Mountain Science Center for Student Involvement, in Avon, Conn. Under the guidance of Science Center staff, students investigate various problems in environmental, earth and space sciences. Students learn to operate many of the Center's scientific instruments, and use this equipment in their research. The "horizons" program, for the most part, is a series of brief studies following problems posed by students or instructors. An older student (in "The Sky Is The Limit") chooses a single topic of investigation for the 15-week program, plans the method of attack, carries out the work as far as possible on his own, and writes a summarizing report. Staff members assist in all stages of the student's work, but do not dictate what to do. "Horizons Unlimited" and "The Sky Is The Limit" are prior approved programs under Public Act 627 for exceptional children. The Avon Public Schools is the sponsoring school district.

1. Student's name _____

2. Student's School, Town _____ _____

3. Student's grade _____

4. Subject of study _____

5. Attendance _____

6. Description of the student's work or project

7. Comments on student's growth in skills, knowledge, social adjustment, special interests, abilities, attitude, weaknesses, problems encountered, etc.

8. Instructor's signature _____ Date _____

_____

*Main instrument for evaluating progress of each student

THOMPSON, CONNECTICUT

THOMPSON PUBLIC SCHOOLS

Name _____ Grade___ Age (yrs./months)_____

Length of time in program_____

	Very Low	Low	Med.	High	Very High
Perception Observes with increasing differentiation the sights and sounds in school and out.					
Develops some consciousness of color, form, arrangement and design in objects and structures around him and in descriptive and symbolic representations of people, things and situations.					
Communication Relates what he is aware of in and out of school to specific topics of discussion and activities we do here.					
Expresses ideas in oral presentation.					
Expresses ideas in written form.					
Creates own forms to express ideas.					
Social, attitudinal and emotional growth.					
Recognition that there may be more than one acceptable point of view.					
Sensitivity to social situations that are urgent. Awareness of the feelings of others whose activities are of little interest to ourselves.					
Realization of the importance of non-vocational activities in a balanced adult life.					
Awareness of the satisfactions that arise from good workmanship and integrity on the job.					

THOMPSON, CONNECTICUT (Continued)

		Minimal Progress	Fair Progress	Good Progress
Fluency -	the ability to generate a ready flow of ideas, possibilities, consequences and objects.			
Flexibility -	the ability to use many different approaches or strategies in solving a problem; the willingness to change direction and modify given information.			
Originality -	the ability to produce clever, unique and unusual responses.			
Elaboration -	the ability to expand, develop and embellish one's ideas, stories and illustrations.			
Remarks:				

VERNON, CONNECTICUT

RESEARCH AND INDEPENDENT STUDY

R.I.S.

Vernon Center Middle School
Rockville High School

We would appreciate your checking the following statements you believe to be true and returning this copy to us. Name of student to be filled in the blanks.

Thank you.

1. As a result of _____'s participation in R.I.S., _____ has become increasingly knowledgeable in a given interest area.

2. _____ has shown increased interest in a concentrated field of study.

3. _____ discusses his activities in R.I.S. at home.

4. _____ is stimulated by what he is doing in independent study.

5. Generally, _____ seems to have increased motivation for school activities.

6. There seems to be no change in _____'s attitude toward school.

7. _____ is disappointed with his progress in R.I.S.

8. _____ finds his work in R.I.S. purposeful and meaningful.

9. _____ finds his work neither purposeful nor meaningful.

10. Please use this space for your comments. It would be helpful to R.I.S. to get your reactions to our program, either from your point of view and/or changes you may have observed as a result of _____'s participation in such a program.

Mrs. Polly Beckley

VERNON, CONNECTICUT

METHODS OF EVALUATION

Results of research and project activities will be evaluated by the teacher-advisor working in conjunction with classroom teachers. Other means of evaluation will include notices to parents on pupil progress, periodic evening seminars: teacher, pupil, parents, and self-evaluation.

The appropriate progress report will be issued based on the following criteria:

1. Progress made in pursuance of the originally stated purpose;
2. Quality reflecting effective research skills, creative expression, uniqueness and advanced knowledge in a given field;
3. Ability to perform independently and resourcefully.

In all cases pupils must maintain a satisfactory level of achievement in order to remain in the program.

WESTPORT, CONNECTICUT

Special Worksnop for the Gifted (Grades 4, 5, and 6)

SPECIAL WORKSHOP - Teacher

Child's Name: _____ Teacher's Name: _____

School: _____ Date: _____

1. In what ways does this child use extra time during the school day?

2. What are the child's special interests?

3. What do you think the child does best?

4. What do you hope this student will gain from the Special Worksnop?

5. Is this child comfortable with his/her self-impression?

6. Is this child comfortable with other children?

7. Does this child share his/her gifts with other children?

8. Do the other children appreciate his/her sharing?

9. How does this child feel about school?

10. Does this child use the inquiry method and an interdisciplinary approach?

11/73

WESTPORT, CONNECTICUT

SPECIAL WORKSHOP - Parent

Child's Name: _____ Date: _____

School: _____

1. When your child has extra time, what does he/she like to do most?

2. What are your child's special interests?

3. What do you think he does best?

4. What do you hope your child will gain from the Special Workshop?

5. Is your child comfortable with his/her self-impression?

6. Is your child comfortable with other children?

7. How does your child feel about school?

8. Does your child use the inquiry method and interdisciplinary approach?

9. How often has your child made use of the Youth Museum in the past?

11/73

WESTPORT, CONNECTICUT

SPECIAL WORKSHOP - Student Questionnaire

Name: _____ Grade: _____

School: _____ Age: _____

Date: _____

1. If you have extra time, what do you like to do most?

2. What are your special interests?

3. What do you think you do best?

4. When I am with other people, I

5. Is there a project you wanted to do in school last year that you did not have the opportunity to do?

6. Do your classmates think you have good ideas?

7. When I am alone, I

8. How do you feel about school?

9. How often have you been at this museum?

WESTPORT, CONNECTICUT

SPECIAL WORKSHOP - Children

Name: _____

School: _____

Age: _____ Grade: _____ Date: _____

1. What do you think this program will do for you?

2. What do you think you will do for the program?

WESTPORT, CONNECTICUT

KEY TO BE USED WITH TALLY SHEET

1. Brief description of work or project.

2. Was this done alone or in a group? State which one.

3. Who helped you with this project? List teacher, community resource person, no one, etc.

4. Could this have been done in the regular classroom? Answer yes or no. If no, why not?

5. Had you ever done anything like this before? Answer yes or no.

6. Did you share this with your class at school? Answer yes or no. If yes, what was their reaction?

VII. BIBLIOGRAPHY ON EVALUATION

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